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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/572,656

03/20/2006

Franz Klug

I0046.0108

6880

38881

7590

03/03/2009

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EXAMINER

AHMED, ENAM

ART UNIT

PAPER NUMBER

2112

MAIL DATE

DELIVERY MODE

03/03/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/572,656	Applicant(s) KLUG ET AL.	
	Examiner ENAM AHMED	Art Unit 2112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-47 is/are rejected.
- 7) ☒ Claim(s) 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/572,656.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/20/06 and 4/18/06</u> . | 6) <input type="checkbox"/> Other: _____ |

Non – Final

Claim Objections

1. Claim 25 is objected to because of the following informalities: The claim mentions "prior to the step of transforming at one of the second data words". The examiner believes the sentence should actually be "prior to the step of transforming at least one of the second data words" . Appropriate correction is required.

35 U.S.C. 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 22, 25-34 and 37-47 are rejected under 35 U.S.C. 102(b) as being unpatentable over Brandes (U.S. Patent No. 4,727,547).

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With respect to claims 22 and 34, the Brandes reference teaches providing a first data word (column 4, lines 26-41); transforming the first data word into a sequence comprising at least one second data word using a first transformation rule (column 4, lines 26-41); transforming at least one of the second data words into a third data word using a second transformation rule (column 4, lines 26-41); and checking whether a prescribed relationship exists between the third data word and a comparison data word (see abstract), (column 7, lines 29-40) and (column 8, lines 36-41).

With respect to claims 25 and 38, the Brandes reference teaches prior to the step of transforming at one of the second data words, modifying the at least one second data word such that a distinct relationship exists between the third data word and the comparison data word (column 4, lines 15-25) and (column 4, lines 26-41).

With respect to claims 26, the Brandes reference teaches wherein the step of modifying the at least one second data word comprises adding information to the at least one second data word (column 4, lines 26-41).

With respect to claim 27, the Brandes reference teaches wherein a distinct relationship exists between the third data word and the comparison data word (column 4, lines 26-41) and (column 4, lines 9-14)

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With respect to claim 28, the Brandes reference teaches wherein the distinct relationship is an identity of the third data word with the comparison data word (column 4, lines 26-41) and (column 4, lines 9-14).

With respect to claims 29 and 37, the Brandes reference teaches wherein the first data word is the comparison data word (column 4, lines 15-41).

With respect to claim 30, the Brandes reference teaches wherein the second transformation rule is a reverse depiction of the first transformation rule (column 4, lines 15-25).

With respect to claim 31, the Brandes reference teaches comprising transforming the first data word to produce the comparison data word by a third transformation rule (column 4, lines 15-25).

With respect to claim 32, the Brandes reference teaches wherein the result of the third transformation rule applied to the first data word is in the prescribed relationship with the result of the application of the second transformation rule after the first transformation rule to the first data word (column 4, lines 15-25).

With respect to claims 33 and 42, the Brandes reference teaches wherein the second transformation rule is identity and the first and third transformation rules are the same (column 4, lines 15-25).

With respect to claim 39, the Brandes reference teaches wherein the first transformation device is configured to modify the second data word such that the prescribed relationship between the comparison data word and the third data word is distinct (column 4, lines 15-41).

With respect to claim 40, the Brandes reference teaches a third transformation device, which is connected upstream of the checking device, and is configured to transform the first data word applied to the data input into the comparison data word (column 4, lines 15-25) and (see fig. 11).

With respect to claim 41, the Brandes reference teaches wherein the second transformation device is configured such that the third data word matches the second data word (column 4, lines 15-25).

With respect to claim 43, the Brandes reference teaches wherein the prescribed relationship is identity of the comparison data word and the third data word (column 4, lines 15-25).

With respect to claim 44, the Brandes reference teaches arithmetic and logic unit and a memory device, wherein the first transformation device is arranged between the arithmetic and logic unit and the memory device (see fig. 5, 159, ADDER, 139, BLOCK COUNTER and 155 – MEMORY ADDRESS DRIVER).

With respect to claim 45, the Brandes reference teaches at least one further transformation device connected upstream and/or downstream of the first transformation device (see fig. 5, 150 – ADDER and 148 – LATCH).

With respect to claim 46, the Brandes reference teaches wherein the data input is a buffer stage (see fig. 5, 148 – LATCH).

With respect to claim 47, the Brandes reference teaches a buffer stage, which is connected downstream of the first transformation device, and is configured to provide the at least one second data word to the arithmetic and logic unit (see fig. 5, 148 – LATCH).

35 U.S.C. 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23-24 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brandes (U.S. Patent No. 4,727,547) in view of Neustein (U.S. Patent No. 5,473,667).

With respect to claim 23 and 35, all of the limitations of claims 22 and 34 have been addressed. The Brandes reference does not teach executing an alarm function if the prescribed relationship does not exist between the third data word and the comparison data word. The Neustein reference teaches executing an alarm function if the prescribed relationship does not exist between the third data word and the comparison data word (column 19, line 60 - column 20, line 14). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined the references Brandes and Neustein to incorporate executing an alarm function if the prescribed relationship does not exist between the third data word and the comparison data word into the claimed invention. The motivation for executing an alarm function if the prescribed relationship does not exist between the third data word and the comparison data word is for improved system performance.

With respect to claims 24 and 36, all of the limitations of claims 23 and 35 have been addressed. The Brandes reference does not teach wherein the alarm function is a function selected from the group consisting of outputting an alarm, shutting down the circuit arrangement, shutting down and starting up the circuit arrangement, and subjecting the third data word to repeat data processing (column 19, line 60 - column 20, line 14). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have combined the references Brandes and Neustein to incorporate wherein the alarm function is a function selected from the group consisting of outputting an alarm, shutting down the circuit arrangement, shutting down and starting up the circuit arrangement, and subjecting the third data

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word to repeat data processing into the claimed invention. The motivation for wherein the alarm function is a function selected from the group consisting of outputting an alarm, shutting down the circuit arrangement, shutting down and starting up the circuit arrangement, and subjecting the third data word to repeat data processing is for improved system performance.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Enam Ahmed whose telephone number is 571-270-1729. The examiner can normally be reached on Mon-Fri from 8:30 A.M. to 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques, can be reached on 571-272-6962.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EA
2/28/09

/MUJTABA K CHAUDRY/
Primary Examiner, Art Unit 2112